

What is claimed is:

1. A photosensitive material processing rack detachably fitted into a processing tank containing processing solution to feed a photosensitive material in said processing solution, said photosensitive material processing rack comprising:

a housing;

a feed roller pair provided in said housing, said feed roller pair feeding said photosensitive material along a feeding path in said processing tank; and

a weight detachably loaded into and/or onto said housing, said weight stably fixing said rack in said processing tank against buoyant force exerted on said rack in said processing solution.

2. A photosensitive material processing rack as recited in claim 1, wherein at least one hollow portion is formed in said housing, and said weight is loaded into said hollow portion.

3. A photosensitive material processing rack as recited in claim 2, satisfying the following formulas:

$$\beta > (V \times \alpha - W) / X$$

$$V \times \alpha > W$$

wherein, W is the weight of said rack without said weight, V is the volume of a part of said rack soaked in said processing solution, α is the specific gravity of said processing solution, β is the specific gravity of said weight, and X is the volume of said weight.

4. A photosensitive material processing rack as recited in claim 3, satisfying the following formula:

$$X \leq v$$

wherein, v is the volume of said hollow portion formed inside
5 said housing.

5. A photosensitive material processing rack as recited in claim 3, wherein the gravity α of said processing solution and the gravity β of said weight satisfy the
10 following formula:

$$\beta \geq \alpha$$

6. A photosensitive material processing rack as recited in claim 2, wherein said housing comprises:
15 an inlet for loading said weight into said hollow portion; and
a lid detachably fitted over said inlet,
wherein said inlet is positioned above the liquid level of said processing solution when said weight is loaded
20 into said housing.

7. A photosensitive material processing rack as recited in claim 2, wherein said housing comprises plural members, said plural members are so welded to each other
25 as to form said hollow portion between said plural members, and a welding surface of said members is positioned above the liquid level of said processing solution.

8. A photosensitive material processing rack as
30 recited in claim 2, wherein said weight is liquid.

9. A photosensitive material processing rack as recited in claim 2, wherein said weight is solid grains or pellets.

5 10. A photosensitive material processing rack as recited in claim 9, wherein said weight is made out of PET (polyethylene terephthalate) or PBT (polybutylene terephthalate).

10 11. A photosensitive material processing apparatus comprising:

 plural processing tanks containing processing solution;

 a rack detachably fitted into each of said processing
15 tanks, said rack having a feed roller for feeding a photosensitive material in said processing solution; and

 a weight detachably loaded into and/or onto said rack, said weight stably fixing said rack in said processing tank against buoyant force exerted on said rack in said
20 processing solution.

 12. A photosensitive material processing apparatus as recited in claim 11, wherein at least one hollow portion is formed in said rack, and said weight is loaded into said
25 hollow portion.

 13. A photosensitive material processing apparatus as recited in claim 12, satisfying the following formulas:

$$\beta > (V \times \alpha - W) / X$$

30 $V \times \alpha > W$

wherein, W is the weight of said rack without said weight,
 V is the volume of a part of said rack soaked in said
processing solution, α is the specific gravity of said
processing solution, β is the specific gravity of said
5 weight, and X is the volume of said weight.